



John Reich Journal

Volume 9 / Issue 3

September 1995

JRCS

JOHN REICH COLLECTORS SOCIETY
P.O. Box 135 Harrison, OH 45030

The purpose of the John Reich Collectors Society (JRCS) is to encourage the study of numismatics, particularly United States gold and silver coins minted before the introduction of the Seated Liberty design, and to provide technical and educational information concerning such coins.

Annual dues \$15.00

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The **John Reich Journal** is the official publication of the Society and is distributed to all members in good standing. Members are encouraged to submit any articles encouraging the study of numismatics and / or relating to early United States gold and silver coins to the editors. Especially needed are articles containing new information about die varieties, die states of published die varieties, attribution methods, collections, collectors, etc.

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Cover Photos: 1798 Bust Dollar (B11b, BB111)
The finest known specimen of this rare obverse die state
and tied for finest known of the variety.
[ex B&M January, 1992:1268]
Photos courtesy of Bowers and Merena Galleries.

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Official publication of the

John Reich Collectors Society

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Editors' Comments

FINALLY, here it is, the latest issue of the **John Reich Journal**. We would like to apologize to the membership for the delay in getting this issue into your hands. We have had some professional responsibilities that have prevented our issuing this **JRJ** on time. Hopefully we will be able to avoid any delay like this in the future. Plans are to have Volume 9, Issue 4 out sometime in November. We currently have almost enough information to fill that issue, but need MORE SUBMISSIONS to publish into the new year. Please send us something that we can use to continue putting out our award winning publication. Oh, we garnered the second place award from the ANA for club publications at this years ANA in Anaheim. Thanks to all the authors that made this award possible.

We would also like to thank all the members that have offered their help in getting this issue out. Each and every offer is appreciated, but this job does not lend itself to much additional help. The best thing that you can do is to write something for publication and send it to us on disk. We will just have to strive to get back on schedule and stay there. Thank you all again for your patience and understanding in this matter.

We hope you enjoy the articles we have to offer this quarter. There are some wonderful articles waiting for you in the following pages. We do, however, need articles for the future issues of the Journal. We are currently almost out of material to publish. Please see if you can sit down at your computer or typewriter some rainy day and put together something for us.

The first thing that we must address in this issue is a major error by the editors. We inadvertently printed a draft of an article by Chris Pilliod. The cover letter that arrived with the article became misplaced and hence the mistake. Chris notified us of the mistake immediately after receiving his issue and informed us that there is a better version on the drawing board complete with illustrations. We are anxiously awaiting the final version for inclusion in the Journal. Again, please accept our apologies for publishing an incomplete article.

Next, Andrew W. Pollock, III has informed us that he is working on a manuscript of gold coinage (1795-1834) by die variety. This is a great undertaking . . . one that could prove to be very rewarding to the entire membership as well as the Numismatic fraternity as a whole! Andrew has requested the help of the membership on this endeavor. If anyone is interested in assisting him, please drop him a note in care of Bowers and Merena, P.O. Box 1224, Wolfeboro, NH 03894. He would appreciate any and every response from our membership that does any specializing or studying within the gold series.

We would like to compliment the owner of a newly cherished 1806 0126 Draped Bust Half Dollar in VG-8. The coin was found at southern show earlier this year by the happy owner.

There has been no response to last issue's request for information on remarriages in the Chapped Bust Half Dollar series. I can only assume that there have been none found to supplement our meager list. I guess the weather has been too nice to spend time looking for die states.

This past ANA in Anaheim had ample time for collector interaction. There was open houses to attend and meet fellow collectors in your specialties. It was a great time to put a face to the name that you have seen in print for so long. It was great to renew, and making new, friendships on the west coast. I do not get many opportunities to travel to California, and it was a welcome change to get out of the Eastern half of the U.S.

Have you found anything of interest for your collections lately? We would love to hear about your most recent discovery. You could also submit a question you want answered about Bust Coinage. We will find someone in the membership that will be able to give an expert response for you.

BUST HALF DIME COLLECTORS

Russ Logan has informed us that it is time to send in your updates for the Bust Half Dime Master Census. Everyone is encouraged to send in their census. Your identity will be kept secret by using your **JRCS** membership number as the heading for your collection. Your personal census will be kept confidential and not used for any other reason. This, and other censuses compiled by the **JRCS** for its members, is a valuable tool for determining rarity and condition census for varieties. Please forward your census, or questions, to the editors at:

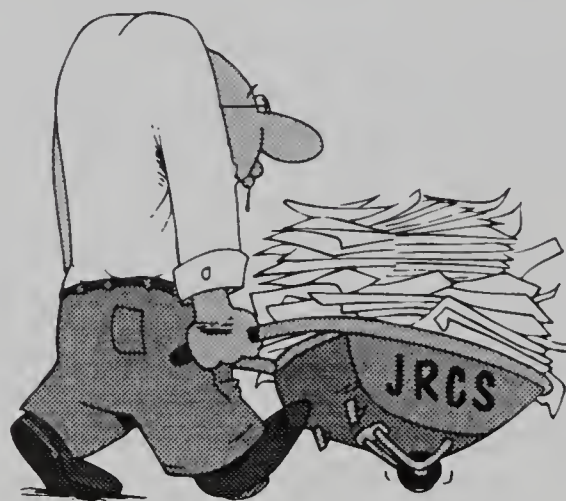
P.O. Box 135, Harrison, Ohio 45030.

Bradley S. Karoleff / Keith G. Bellman

Plaudits, Pans and Perplexing Points

JRCS

Again, Brad and Keith are to be congratulated on a fine issue of the **JRJ**, Volume 9, Issue 1 (October, 1994). The news that David Finkelstein won the **Jules Reiver Literary Award** was totally expected. Mr. Finkelstein's well written and conceived article regarding the Die Dentil Analysis is a major contribution to the evaluation techniques which we can use to unravel the mysteries of the Mint's early modus operandi.



I am also glad to see that there has been a response to my article on the reevaluation of how the quantities of coins produced by the Mint during its 18th century operations are reported. While Richard Snow is entirely correct that the only hard data we have is the original figures provided in the delivery warrants in The National Archives, he has apparently missed the point of my analysis of these very same figures. I spent more than a few months pouring over the delivery warrant data, and reached the conclusion that the data did not reflect the quantity of the number of coins struck by date. Therefore, that information is not able to, by itself, provide us with "accurate mintage figures." Furthermore, since the date on the early U.S. coins which we collect is, in most cases, less important than the variety, design, or type, I sought out methods which could help modern collectors assess the rarity of the specific varieties of the coins which they seek.

There are more than a few disclaimers in my article, including: "... the author disavows any implied accuracy of these guesses for the reasons which have been clearly stated in this very article." In addition to the implication that Mr. Snow made that I tried to derive "accurate" mintage figures from the number of surviving specimens, he also mentions "wholesale meltings and the discovery of random hoards." In response to these questions, I refer to page 22, **JRJ**, Volume 8, Issue 3 (April, 1994), where I referenced the 1842 discussion of the issue of recoinage of the old standard gold coins after the Mint Act of 1834, as well as the contemporary 18th century melting of gold coins for the purpose of exchanging the bullion for silver coinage of higher face value. I accounted for the absence of the effects

that collectors in the early years of our nation could have made regarding random distribution of varieties, and concluded that the meltings should have been random, thus preserving the ratios of survivors to initial mintages. I could be wrong, but I would like to see some evidence that argues against my hypothesis.

Regarding the discovery of “hoards” of early U.S. gold eagles, I would be fascinated to learn of the contents of such a hoard. Does anyone know of any? Please write immediately, as this would be very valuable data indeed! Perhaps there are early gold half-eagles and quarter eagles to be found in the hoards unearthed from the Civil War era, but I doubt that any early gold eagles that survived the melting pots of the 1830s would have found their way into these hoards. This because they were of much larger size than eagles minted since 1838, and had not been minted since 1804.

One last observation I would like to make is that the concept of attribution of origin, quantity, authorship, date, and authenticity is applied with great frequency to many disciplines of art and antiques other than numismatics. If there is any compelling reason why making an attribution of the number of surviving paintings by DaVinci is any different than making an attribution of the number of surviving specimens to an approximate original mintage of coins, I am unaware of it. In the case of DaVinci, we have equally well documented data on his productions as we do of the U.S. Mint’s production three centuries later. Yet, there is still an awful lot of guess-work, speculation, and academic argument going on in this area.

If original mintage figures cannot be known, there is nothing else but a guess. This hardly qualifies as historical deception, as Mr. Snow has suggested. I would look at the guessing process as one step towards the refinement of the true nature of the meaning of the delivery warrant data. Hopefully, I have added a small step in that process, or at the very least, have stimulated someone else to come up with a better method.

Apropos to something else, I do not recall seeing any Bust Halves at the NY International Show in December . . . nor any Bust Half Nuts! I did find another specimen of a Gold Dobra of Pedro I of Spain, circa 1350s, which, by the way, did come from a hoard of Uncirculated examples found in the 1970s. Maybe a hoard of 1798/7 eagles will still be found.

David Kenny

New Variety of 1800 Draped Bust Half Dime Ed Price

Last summer, I purchased an 1800 Draped Bust Half Dime which is a previously unreported variety. This new variety marries the well known 1800 LIBEKTY obverse with a previously unreported Heraldic Eagle reverse. Jules Reiver has examined the coin and agrees that it is a new variety and that the reverse was struck from a previously unknown die. This article describes the coin and its distinguishing characteristics of the known Heraldic Eagle reverse dies. It also provides observations on possible emission sequence and reports on my catalog search for other examples of the new variety. There are three previously known varieties dated 1800. I will refer to the new variety as 1800 Valentine-4 (V4).

Description

The photographs with this article include the obverse and reverse of the new V4, including both the discovery coin and one found during my catalog search. Also shown are the three other Heraldic Eagle reverse dies used on the eleven previously known varieties of Draped Bust Heraldic Eagle Half Dimes. ^(A) The one other known use of this obverse die is the 1800 V2 (LIBEKTY) Half Dime.

The new variety appeared as Lot #5181 in Heritage's ANA Sale held in July of 1994. The catalogue description included:

1800 VF 30 Corroded. Steel-toned surfaces with deeper gray coloration here and there. The central devices display the sharpness of an XF, but slight peripheral weakness and modest corrosion limit the grade . . .

The coin was not plated. The description is reasonable. Although I believed the coin to be genuine, I submitted it to the ANA Authentication Bureau (ANAAB) for their opinion. I did not indicate that I believed the reverse to be from a previously unreported die. ANAAB apparently identified the coin from its easily recognizable obverse die. ANAAB provided a certificate dated August 30, 1994, indicating that the coin is genuine. They identified it as:

****U. S. A. 1800 5¢ - Libekty - Breen 2976 - Corroded****

Die Characteristics

Jules and I reviewed the characteristics of the four Heraldic Eagle reverse dies in some detail. Many of the differences we noted are included in the six characteristics described below. There are many more differences - particularly in the relationships between the clouds themselves, the letters above them as well as the stars below them.

First Reverse (used on 1800 V1, V2 and V3)

1. Berry relative to A3 - under left side of right serif
2. Leaf tip relative to CA - almost touches right edge of C, leaf touches A3
3. Leaf tip relative to I2 - covers right serif only
4. Star 12 relative to beak - upper beak touches top star point close to star center, lower beak almost touches upper right star point
5. Top three arrow groups ^(B) :
 - first - one head
 - second - 2 heads, extends slightly beyond first arrow group
 (heads on separate shafts quite close to each other)
 - third - 2 heads, clearly shorter than first or second group
6. Stars - star 8 a little closer to star 7 than star 9 and to left of and below star 9

Second Reverse (used on 1801 V1, V2 and V3; 1802 V1; 1803 V1 and V3)

1. Berry relative to A3 - under right side of left serif (berry is weak and away from leaves)
2. Leaf tip relative to CA - penetrates C between center and right side of C, leaf away from A3
3. Leaf tip relative to I2 - under upright
4. Star 12 relative to beaks - upper beak touches upper right star point near point, lower beak left of upper right star point
5. Top three arrow groups ^(B) :
 - first - one head
 - second - 2 heads, extends slightly beyond first arrow group
 - third - 3 heads, clearly extends beyond first or second group
6. Stars - star 8 much closer to star 7 than star 9 and to left of and below star 9

Third Reverse (used on 1803 V2 and 1805 V1)

1. Berry relative to A3 - under left side of right serif
2. Leaf tip relative to CA - under right edge of C, leaf touches A3
3. Leaf tip relative to I2 - touches point of right serif
4. Star 12 relative to beaks - upper beak close to top star point just below point, lower beak left of and below upper right star point
5. Top three arrow groups ^(B) :
 first - one head
 second - 2 heads, extends slightly beyond first arrow group
 (second head 'floating' - very faintly connected to first head)
 third - 2 heads, clearly shorter than first or second group
6. Stars - star 8 a little closer to star 7 than star 9 and to left of and below star 9

'New' Reverse (used on 1800 V4)

1. Berry relative to A3 - under right side of left serif (berry is strong and close to or touching leaves)
2. Leaf tip relative to CA - penetrates C between center and right side of C, leaf just touches A3
3. Leaf tip relative to I2 - covers right serif and extends into upright
4. Star 12 relative to beak - upper beak touches upper right star point close to star center, lower beak left of and below upper right star point
5. Top three arrow groups ^(B) :
 first - one head
 second - 2 heads, extends slightly beyond first arrow group
 third - 3 heads, clearly extends beyond first or second group
6. Stars - star 8 equidistant from star 7 and 9 and directly to left of star 9



First Reverse for
1800 (V1, V2, V3)



Second Reverse for
1801 (V1, V2, V3)
1802 (V1)
1803 (V1, V3)



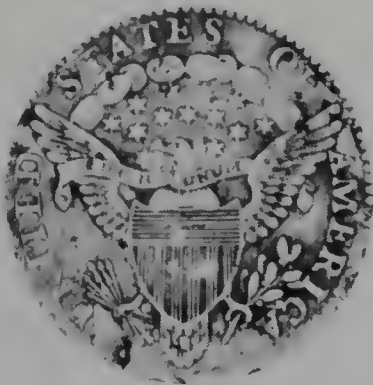
Third Reverse for
1803 (V2)
1805 (V1)

While the information above is too detailed for quick use, to quickly identify the new variety, note that:

- (1) the top three arrow groups on the new reverse are progressively longer and have one head, two heads and three heads respectively - quite different from the first and third reverses, although similar to the second reverse. This characteristic alone is sufficient to determine that an 1800 half dime is not struck from the reverse used for the three previously known varieties. An additional sufficient characteristic is the overall position of STATES OF relative to the clouds below. On the new variety the letters are significantly further above the clouds than on the reverse used for the other three varieties of 1800.
- (2) Star 8 is midway between stars 7 and 9 on the new reverse, while star 8 is closer to star 7 than to star 9 on the second reverse. This characteristic, along with (1) above, is sufficient to determine that the reverse die on the new variety differs from all other known Heraldic Eagle reverse dies.
- (3) There is a double dentil over the upright of E2 on the new reverse. This does not appear on any of the other known Heraldic Eagle reverse dies.

Emission Sequence

The emission sequence for the first three varieties for 1800 is generally accepted as V1, V3, V2. This is based on observation of cracks and other damage to the reverse die used for the three varieties. The reverse damage which develops near BUS on V2 is not present on either V1 or V3, so V2 is clearly last.



New Reverse
1800 (V4)



Obverse for
1800 (V4)

NEW VARIETY OF 1800 DRAPED BUST HALF DIME

The obverse of 1800 V4 (the new variety) is similar to later die states of 1800 V2. Early die states of V2 have no die damage to the left of the date. Later die states of V2 develop this damage, which is also present on V4. This analysis suggests that V4 was struck after V2 and would then be the last struck of the four known varieties.

However, there is a small raised dot just above and to the right of the right point of Star 1 on all of the late state V2s I have examined. The dot also appears to be more faintly present on at least some early die states of V2 and may be very faintly present on the V4 discovery piece. This suggests that the progression may have been: V2 (early die states), V4, V2 (late die states). There is clear evidence of such remarriages in later series. Further study is warranted.

Catalog Search

The reverse of the V4 discovery coin has no major die cracks. There is a relatively minor die crack or die scratch and some die damage on the shield. This die crack or die scratch starts about one-third of the way down on the second set of narrow stripes, runs through the third set and angles down slightly to the fourth set of narrow stripes. At the fourth set of narrow stripes it meets some die damage, perhaps a bulge, which angles up to the fifth set of narrow stripes.

The other three Heraldic Eagle Half Dime reverse dies were each used with several obverses. Two were used for coins dated in multiple years. The first two reverse dies developed noticeable damage before they were discarded. The third did not develop damage, but was the final die used for this type. Therefore, it seems unlikely that the V4 reverse was used for a small number of 1800 half dimes and then discarded. I suspect that there are a number of V4s extant which have been misattributed from the LIBEKTY obverse as V2. Further, the V4 reverse may possibly have been paired with another 1800 obverse - and may well have been paired with an 1801. To test this I conducted a catalog search which included:



Obverse of Bowers &
Merena 1/24/95 sale,
Lot#1502.



Reverse of Bowers &
Merena 1/24/95 sale,
Lot#1502.

- all Bowers and Ruddy (1972-1983)
- all Bowers and Merena (1983 to date)
- all 'Apostrophe' (1979-1990)
- all Superior (1971 to date)
- Mid-American (1984-1990)
- Stack's (1955 to date, selected earlier catalogs)
- selected catalogs from Heritage, Kosoff, Paramount, New England, New Netherlands and other miscellaneous dealers

The search yielded no further marriages of the new die. I did find one additional 1800 V4. This coin appeared as lot #1502 in Bowers and Merena's 1/24/85 sale and then reappeared as lot #1488 in Superior's 9/30/85 sale. The Bowers and Merena description included "VG-8. Bent and straighten (*sic*). The surfaces are somewhat granular at the peripheries with a bit of pitting present over Miss Liberty." The Superior description included "Detail of Very Good 8, but with some rather severe surface marks on both sides. Light to moderate gray toning."

The plates in both catalogs clearly show that the coin is V4, but I felt that this article would be substantially enhanced by a photograph of the coin. I wrote to Mark Borckardt at Bowers and Merena asking about photos of lot #1502 from their 1/24/85 sale. By return mail, and at no charge, I received the photographs shown from Cathy Dumont-Wilson, Photographer for Auctions by Bowers and Merena Galleries. I very much appreciate their interest in the **John Reich Journal** and their immediate response.

Although the B&M coin looks similar to the discovery coin, the pitting and bend are clearly different. The obverse shows more wear although the same die damage to the left of the date appears to be present. The reverse has about the same wear as the discovery coin and appears to have the same die crack or die scratch and damage on the shield.

[If you find an 1800 V4 or another use of the reverse die, I would appreciate hearing about it. Please feel free to write to me at P.O. Box 1556, Livingston, NJ 07039.]

History

One way to think about the significance of this discovery is to consider the history of half dime literature. Several authors have either listed the then known varieties of Heraldic Eagle Half Dimes (1800-1805) or provided updates on new varieties. A chronological summary using current 'Valentine' designations is below:

NEW VARIETY OF 1800 DRAPED BUST HALF DIME

Newlin ⁽¹⁾ (1883) - listed eight varieties using seven obverse and three reverse dies:

- 1800 - V1, V2 - [also a reference to "one or two pieces which differed"
- 1801 - V1 slightly from these two varieties]
- 1802 - V1
- 1803 - V1, V2, V3
- 1805 - V1

Valentine ⁽²⁾ (1931) - listed one additional variety using one additional obverse die:
1801 - V2

Breen Monograph ⁽³⁾ (1958) - listed no additional varieties.

Davis Section in Valentine reprint ⁽⁴⁾ (1975) - reported one additional variety using one additional obverse die:
1800 - V3

Reiver ⁽⁵⁾ (1984) - listed no additional varieties.

Reiver Article in JR Journal ⁽⁶⁾ (1987) - reported one additional variety using one additional obverse die:
1801 - V3

Breen Encyclopedia ⁽⁷⁾ (1988) - listed no additional varieties (did not include 1801 V-3).

The above shows that Newlin had identified three reverse and seven obverse dies in 1883. Since then three more obverse dies have been discovered, each paired with a reverse known to Newlin in 1883. So the 1800 V4 reflects the first new Heraldic Eagle Half Dime reverse die discovered in at least 111 years. The 1800 V4 also demonstrates, once again, that even a well studied series may yield new dies to persistent - and lucky - collectors.

The key to discovering this variety was actually verifying the reverse of a coin which seemed, from its obverse, to be a common variety. I do not always have the discipline to do that. Fortunately, I was looking at auction lots and had no pressure to review them quickly. I might not have looked carefully enough to spot this one at a dealer's table.

Variety collectors know that 1800 V1, V2 and V3 can be identified by the position of the first obverse star and the shape and relationship of the numerals in the date - as well the incomplete R on the LIBEKTY (V2) variety. Since we also 'know' that the reverses are all the same, the reverses are often not examined at all. I hope that now we will all look at our 1800 half dimes to check the reverses!

Notes

- (A) Most collectors believe that there were previously eleven known varieties of Heraldic Eagle Draped Bust Half Dimes. There is a minority view, shared by the author of this article, that 1801 V1 and 1801 V2 are most likely struck from different states of the same obverse die. (There is full agreement that they use the same reverse die.) Jules Reiver has written several very helpful articles on 1801 half dime varieties. These articles appeared in Volume 2, Issue 1 (January, 1987), Volume 2, Issue 2 (July, 1987) and Volume 3, Issue 1 (April, 1988) issues of the **John Reich Journal**.
- (B) An 'arrow group' is one or more arrow heads on a single shaft. In the case of the first reverse, the second arrow group actually includes two shafts which are quite close to each other.

Citations

- (1) Harold P. Newlin, **A Classification of the Early Half-Dimes of the United States**, John W. Haseltine, 1883.
- (2) D. W. Valentine, **The United States Half Dimes**, The American Numismatic Society, 1931.
- (3) Walter Breen, *United States Half Dimes: A Supplement*, **The Coin Collector's Journal**, Wayte Raymond Publications, 1958.
- (4) David J. Davis, *Major New Varieties*, **The United States Half Dimes**, Quarterman Publications, Inc., 1975.
- (5) Jules Reiver, **Variety Identification Manual for United States Half Dimes 1794-1837**, Jules Reiver, 1984.
- (6) Jules Reiver, *A New 1801 Half Dime*, **John Reich Journal**, Volume 2, Issue 1 (January, 1987), John Reich Collectors Society.
- (7) Walter Breen, **Complete Encyclopedia of U.S. and Colonial Coins**, Doubleday, 1988.



Off-Center Bust Half Dollars: A Definitive Description

Russell J. Logan

Q. David Bowers made a very valid observation in a recent Bowers & Merena **Rare Coin Review** when he stated that “many in the numismatic hobby are in love with numbers.” We in JRCS are also guilty of this number crunching, the present author included. Who would not want to predict how many additional specimens of a R8 die marriage will be discovered in the next 3 years? Or what rarity should be assigned to a new die marriage whose discoverer announces he has found two specimens? Or how many Bust Halves exist today? Or why new die marriages of 1794 large cents and half dollars are still being discovered?

But when wrong numbers are crunched, we get wrong answers! So it is with describing the off-center strike errors of the Bust Half Dollars. There seems to be no standard reference to describe an off-center Bust Half Dollar other than a photograph. And, like grading, the seller tends to overstate the degree of error.

EXISTING TECHNIQUES FOR DESCRIBING OFF-CENTER BUST HALVES

When asked how one determines the degree of off-center, one is usually informed that it is either a subjective observation that is acquired from a lifetime of experience or it is a ratio of two linear measurements taken from the coin. See Figure I.

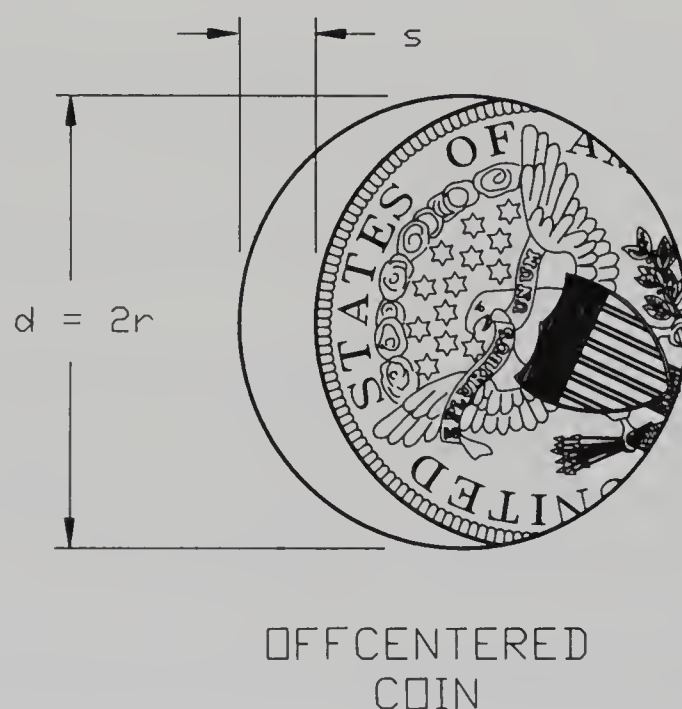


FIGURE I - The linear ratio of s/d does not describe the true magnitude of the degree of off-center.

Unfortunately neither of these methods yields reliable results when one desires to compare the magnitude of the unstruck area of the crescent to the total area of the coin. A ratio of linear measurements cannot do the job because the concept of area, which is paramount when dealing with off-center mint errors, is not addressed. Consider a coin that would be “half off-center” using a ratio of linear measurements ($s/d = 0.5$). See Figure II. It is clear from observation alone that well over half of the area of this coin is unstruck. What is needed is a measurement of “percent off-center” that (a) equates to “percent off-center” and (b) is comprehensible and useful for the non-number cruncher.

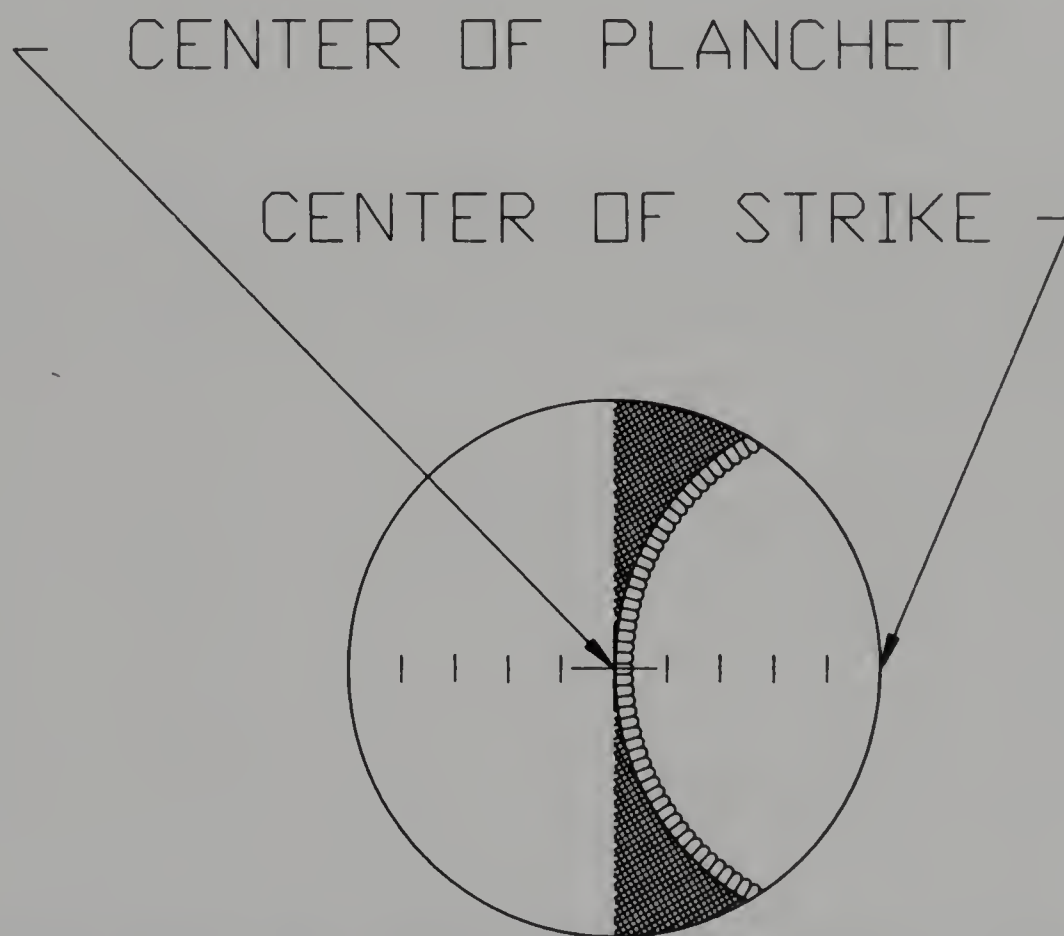


FIGURE II - A coin struck on its periphery by the center of the working die. The linear ratio s/d is 0.5 but less than half of the coins' area is struck as evidenced by the shaded area.

To determine the percent of area that is off-center, we must take the ratio of unstruck area of the coin to the total area of the coin. Unfortunately the number crunching can be rather painful, and except for a calculus based table for determining the percent of off-center presented in a recent article in the July/August 1994 **Errorscope** by Carlton Greve, there has been no easy method proposed. Here we will provide the reader not only with a simplified method for determining the percent off-center but also with the other parameters needed to describe an off-center Bust Half Dollar.

PROPOSED METHOD FOR DESCRIBING OFF-CENTER BUST HALVES

There are five factors which, if properly described, will define an off-center Bust Half:

- 1) Magnitude of off-centering
- 2) Direction of off-centering
- 3) Flatness of planchet
- 4) Doubling of Strike
- 5) Description of Edge

Magnitude of Off-Center - To determine the magnitude of off-center, we need to develop a formula to determine the unstruck area as a percentage of the entire planchet. See Figure I for definition of variables. The math can be done with calculus and access to a computer, and yields the following equation:

$$\text{Percent off-center} = \frac{L \times \sqrt{1 - L^2} + \arcsin(L)}{1.57} \times 100$$

Where:

$$L = \frac{s}{d} \quad \text{From Figure I}$$

These equations become rather cumbersome and are best solved with the aid of a PC, the results of which are shown in tabular form in Table I.

The easiest method to determine 's' is to place the design of a normal coin directly above the corresponding design of the off-center piece and measure the offset (s). A dial caliper is ideal for this job, but any ruler with fine gradations will do. Divide this measurement by the coin's average diameter (d) and calculate the ratio s/d (L); locate this value in the first column of Table I and read the adjacent column for percent off-center.

Linear Ratio	Theoretical Off Center	Linear Ratio	Theoretical Off Center
(s/d)	(% of area)	(s/d)	(% of area)
0.025	3.1%	0.525	63.6%
0.050	6.3%	0.550	66.3%
0.075	9.5%	0.575	69.0%
0.100	12.6%	0.600	71.5%
0.125	15.8%	0.625	74.1%
0.150	19.0%	0.650	76.5%
0.175	22.1%	0.675	78.9%
0.200	25.3%	0.700	81.2%
0.225	28.4%	0.725	83.4%
0.250	31.5%	0.750	85.6%
0.275	34.6%	0.775	87.6%
0.300	37.6%	0.800	89.6%
0.325	40.7%	0.825	91.4%
0.350	43.6%	0.850	93.2%
0.375	46.6%	0.875	94.8%
0.400	49.6%	0.900	96.3%
0.425	52.5%	0.925	97.6%
0.450	55.3%	0.950	98.7%
0.475	58.1%	0.975	99.5%
0.500	60.9%	1.000	100.0%

TABLE I - Percent of area off-center as a function of 's' and 'd'.

Table I is not much more practical than Greve's Table as they both require a direct reference to a chart. But for those of us who wish quick answers without carrying added reference work in our wallets, all we have to do is apply a conservative rule of thumb which will yield accurate results for values of s/d less than 0.65: just multiply the s/d ratio by 1.2 to obtain the percent off-center! See Table II. For values of s/d less than 0.65 (which include all known off-center bust halves) the maximum error for percent off-center will only be 2%. For values of s/d greater than 0.65 the total contents of your wallet will be depleted regardless of the degree of your love of numbers!

Linear Ratio	Theoretical Off Center	Approximate Off Center	Error
(s/d)	(% of area)	(% of area) 1.2 x (s/d)	
0.025	3.1%	3.0%	-0.1%
0.050	6.3%	6.0%	-0.3%
0.075	9.5%	9.0%	-0.5%
0.100	12.6%	12.0%	-0.6%
0.125	15.8%	15.0%	-0.8%
0.150	19.0%	18.0%	-1.0%
0.175	22.1%	21.0%	-1.1%
0.200	25.3%	24.0%	-1.3%
0.225	28.4%	27.0%	-1.4%
0.250	31.5%	30.0%	-1.5%
0.275	34.6%	33.0%	-1.6%
0.300	37.6%	36.0%	-1.6%
0.325	40.7%	39.0%	-1.7%
0.350	43.6%	42.0%	-1.6%
0.375	46.6%	45.0%	-1.6%
0.400	49.6%	48.0%	-1.6%
0.425	52.5%	51.0%	-1.5%
0.450	55.3%	54.0%	-1.3%
0.475	58.1%	57.0%	-1.1%
0.500	60.9%	60.0%	-0.9%
0.525	63.6%	63.0%	-0.6%
0.550	66.3%	66.0%	-0.3%
0.575	69.0%	69.0%	0.0%
0.600	71.5%	72.0%	0.5%
0.625	74.1%	75.0%	0.9%
0.650	76.5%	78.0%	1.5%

TABLE II - By multiplying the 's/d' ratio by 1.2, we obtain an excellent approximation of percent off-center for values of 's/d' less than 0.65.

Direction of Off-Center - Although some people prefer using the points of a compass or the degrees of a circle, an excellent and traditional method for defining the direction of off-center is by relating it to the face of a clock. With the obverse design orientated upright, the direction of off-center is defined by drawing a line from the center of the planchet to the center of the strike. Consider this vector the hour hand and read the 'time'! Again by placing a normal coin directly on top of corresponding design of the off-center piece, it helps to define this vector. See Figure III.



FIGURE III - The direction of off-center is defined by drawing a vector from the center of the planchet to the center of the strike and then reading this vector, with the coin upright, as if it were the hour hand of a clock. The direction of off-center for this coin is 3:30.

Flatness of Planchet - Because so many of these off-center coins were struck outside the collar, the planchet may be convex (dished towards the reverse or concave (dished towards the obverse). But more often than not, some misguided soul has tried to restraighthen the dished coin. To determine the degree of curvature, stack normal bust halves on top and below the off-center coin. Describe the flatness irregularities. Is there evidence that the coin is concave? Is it toward the obverse? With the coins stacked, is the off-center coin dished enough to represent twice the thickness?

Doubling of Strike - Many bust halves that are struck more than 5% off-center depict a second set of dentils within the struck area of the obverse. The dentils appear to be an understrike. Perhaps this is caused by the planchet moving during the strike because the collar does not restrain the coin. An example of this phenomenon is shown in Figure IV. An additional example is shown on the bottom of page 618 of the third edition Overton.



FIGURE IV - A faint row of extra dentils are visible on this off-centered coin at star 7 and Miss Liberty's cap. This phenomenon occurs on many off centered bust halves.

Description of Edge - Because the edge lettering is applied to the half dollar planchet prior to striking, there should be edge lettering around the entire periphery of the off-centered coin. It is interesting to note that when the edge of a coin is formed in the Castaing machine and then struck off-center, the edge is upset (raised) throughout the unstruck area (see Figure V).

Two additional factors are also necessary, albeit with modifications, to describe both a normal and off-center bust half:

- 1) Degree of circulation
- 2) Year and Overton number

Degree of Circulation - Do not be afraid to use your normal grading criteria, especially on areas that were well struck and not shielded by the dished effect. Fortunately for us, the 'investors' have not yet discovered the existence of off-center coins - why would anyone want something less than perfect?

Year and Overton Number - Attribution to Overton is the common denominator for describing a Bust Half; but the greater the off centering, the more sporadic the diagnostics to attribute the correct die marriage.



FIGURE V - OFF-CENTER COIN #1 - Magnitude of off-center: $s=.239$, $d=1.272$. $s/d \times 1.2 = 22.5\%$. Direction of off-center is 7:00. Vacant field above Miss Liberty dished towards obverse approximately 25% of the coins thickness. No doubling of strike visible; normal lettered edge. Good surfaces - grades VF.

A CHALLENGE TO THE READER

To make the point about attribution difficulties, this article illustrates two no-date off-center Bust Halves. Both coins are described in their caption with the suggested nomenclature for the first six factors and a challenge to the reader to attribute the die marriage!

The first JRCS member who correctly identifies both die marriages by Overton will be treated to dinner during ANA at Denver. Be prepared to explain how you accomplished this feat as it will definitely influence the quality of the restaurant selected!

CONCLUSION

Not only are these off-center coins made during the screw press era interesting and challenging to collect, but they also aid us in the understanding and reconstruction of the machinery and minting practices of the Federal Mint. Their secrets yield numismatic knowledge that is more rewarding than just filling holes in a type set, and are every bit as challenging. Hopefully the pedigree and census of these coins may be better established if dealer and collector alike uses the terminology as outlined in this paper. Many thanks to Henry Hilgard and Jerry Schertz for their encouragement and constructive input for this article.



FIGURE VI - OFF-CENTER COIN #2 - Magnitude of off-center: $s=.458$, $d=1.300$. $s/d \times 1.2 = 42\%$. Direction of off-center is 8:00. Coin has been straightened and is now dished towards the reverse approximately 100% of the coins thickness. No doubling of strike visible; normal lettered edge. Obverse extremely porous, both on the struck portion and the unstruck portion. Old cleaning - EF detail.



Reduced Size Capped Bust Quarters: A 1993-1995 Case Study

Ken Cable

During the past two years I have conducted a personal study on the Capped Bust Quarters minted from 1831 through 1838. As this is a short series with little variation of price from date to date (especially in the circulated grades, much like the Bust Half Dime series), the main purpose of this study was to discover different varieties (which may or may not be attributable to A. W. Browning), and the secondary purpose was to get an idea of relative rarity of each date and variety within this series.

Unlike the Overton, Valentine, and some other studies, my project has been superficial and did not require a magnifying glass or a micrometer for most of my findings. This is because the study was not aimed at die varieties, or effect of die states, but rather at variation in the method of manufacture. More succinctly, the principal focus of this study was variation that was intentional rather than accidental. I have examined a total population of 424 Reduced Size Bust Quarters since February, 1993. The majority of these coins were viewed at local or regional coin shows. Below are my observations for both circulated (grades up through AU-58 plus raw borderline pieces advertised as MS) and certified Uncirculated (MS-60 through MS-65) pieces:

I. Circulated Specimens

Rarity rank by date, within the sample under study, is listed from least to most frequently encountered (392 specimens): 1832, 1833, 1836, 1838, 1837, 1831, 1835, 1834. This ranking certainly is not consistent with the reported mintage figures. This observation leads me to theorize that many of the 1.9 million quarters reportedly minted in 1835 were dated 1834, and that perhaps all other issues of this series were wholly, or in part, dated a year or more behind. (The updated Browning text suggests this for certain dates.)

This group actually includes some raw coins advertised as 'Unc.' but which were not, in my opinion, because of friction on the hair detail, the bust, or the periphery of the eagle's left wing. In other cases, friction, generally in these same areas, appeared to be hidden by artificial (yet attractive) toning. While die cracks were not a focus of this study, several interesting breaks were observed even on well-worn pieces, mostly in the obverse left field. Clearly, even on otherwise damaged specimens, this was not damage but a die break.

On some of the 1831 large letter pieces, I observed what appeared to be adjustment (file) or alignment (press) marks. In general, I have not observed adjustment or alignment marks of Mint origin on Reduced Bust Quarters with the frequency that I have seen on the dimes and halves of the same period.

The most noteworthy feature observed in this study was a virtually complete reworking of the reverse design on many of the 1834 coins. On most of the 1834s, I examined the right wing span was considerably greater, the placement of the lettering was different, the characteristics of the arrows, leaves and eagle's claws were profoundly different, with no period after "25 C." This variety is referenced by Browning as the first variety for that year. I have also observed these characteristics on 1833 pieces which are defined as the B2 variety. However, I feel that there may be multiple subclasses of 1834 B1 which would further elaborate on the device detail. In standard coin guide books, I have not seen any references to varieties of Reduced Size dates other than the 1831 Small and Large Letters. Interestingly, I observed about a one-to-one relationship between the 1831 Small and Large Letters varieties, yet a clearly disproportionate ratio of 'weird' 1834 pieces to normal ones. In my opinion, the 1833s of the same ilk were likely coined during calendar year 1834.

I observed three examples of 1834 where the reverse was rotated approximately 45 degrees with respect to the obverse, and did not note such an obtrusive rotation on any other date. I only saw one 1835 example with no period after the "C" and the 'normal' eagle of 1831-1832 and 1836-1838; two with no period and the larger (what I refer to as the 'abnormal') eagle; and one with the period and the abnormal eagle. I noticed quite a bit of variation among character placement on the reverse within the 1835 issues. Based on my observation of numerous 1834s, yet a paucity of 1835s with the abnormal eagle, I deduce that this was an experimental design was introduced sometime near the beginning of calendar year 1834, and retired sometime during 1835 reverting to the original design.

I did not see many 1836 specimens, but in the ones I observed, there was a noticeable variation in the placement and spacing of "25 C." No variations in the devices themselves have been observed within the 1836 issues, and none are referenced in Browning.

On some EF/AU pieces of 1837-1838, I noticed an atypical sharpness of device detail not found in the 1831-1836 coins (both on the obverse and reverse), I also observed uniformity of the obverse rim. A thought crosses my mind that the strikes were better because these coins were now struck on the steam press, which was used for other silver coins of 1837-1838 and also the Seated Liberty Quarters coined later in 1838. (Does anyone know if a Bust Quarter die was in fact prepared for the steam press?)

II. Certified Uncirculated Specimens.

Rarity rank within sample, from least to most frequently encountered (32 specimens): 1836, 1832, 1833 & 1838, 1835, 1837, 1834, 1831. This ranking, although taken from a very small sample, is relatively consistent with the population reports for PCGS and NGC. The 1836 is by far the scarcest issue, of which there were none in my sample. In fact, I have personally never seen an 'Unc.' example of 1836. The 1832 and 1833 seem to be running neck-and-neck in overall PCGS/NGC 'Unc.' population, with higher-grade specimens of 1833 (MS-63 and MS-64) slightly more plentiful than 1832. There is only one 1832 (a PCGS MS-63), two 1833s and two 1838s in my sample.

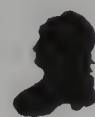
The vast majority of these Uncirculated coins had some sort of die crack or other machine-caused defect. Clash marks and flatness of strike were also evident. Stars 5 through 7, in particular, lacked fully raised definition in many of the certified Uncs. In some instances, the coins were so weakly struck around the bust area that the details such as the bow and clasp were completely missing. Were the coins not in slabs I may have mistaken such anomalies for wear. Alignment marks were observed on 1831 pieces, such that the grading service could have downgraded the coins as if the impressions created by the screw press were post-mint contact marks.

Only one of these coins, an 1835, was graded MS-65. There have been no higher grades in this sample to date. Even this piece was not fully struck.

On one of the 1837 coins, the strike was razor-sharp, with every bit of detail bold on both sides. While Browning lists four varieties of 1837. He does not mention such a strike on any of these varieties.

On both 1838 pieces, the obverse device detail appeared stronger than on the 1835s, but less defined than the aforementioned 1837.

I have made this study on Reduced Size Capped Bust Quarters an ongoing project, as I plan to examine more of these type coins to fine-tune my data, and do more research on possible sub-varieties of the Browning series.



1797 and 1798 Eagles - Corrected Die Emission Sequence

Anthony J. Taraszka

Breen's monograph on United States Eagles, suggested that for the large (heraldic) eagle reverse of the 1797-1798 eagles the die emission sequence was 1797 Breen-2B, 1797 Breen-2C, 1797 Breen-2D, 1798/7 Breen-1A (9x4 stars), 1798/7 Breen-2A (7x6 stars).

Subsequently, Harry Bass correctly concluded, from die lapping evidence, that the 1797 Breen-2D variety was struck before the 1797 Breen-2C variety (Bass No's. 2C and 2D respectively). One can arrive at the same conclusion by examining the die break between the edge and star 8 (clockwise from left). On the 1797 Breen-2D variety the crack extends about halfway to the farthest star point. The same crack in the 1797 Breen-2C variety extends beyond the end of the farthest star point on star number eight. Therefore, the 1797 Breen-2D (reverse of 1798) was struck before the 1797 Breen-2C variety.

Determining whether these two 1797 varieties were struck before or after the two 1798/7 varieties requires a comparison of the die characteristics of the common reverse die used to strike the 1797 Breen-2D and both 1798/7 varieties.

Figure A, the reverse of 1797 Breen-2D, demonstrates a die crack starting at the bottom of the eagle's beak (between neck and ribbon), continuing diagonally to the right through the ribbon and breast, entering the shield slightly left of center, and ending at the top left portion of the fifth three line stripe. In addition, one can see evidence of die lapping at the ends of the tail feathers and the arrow butts.

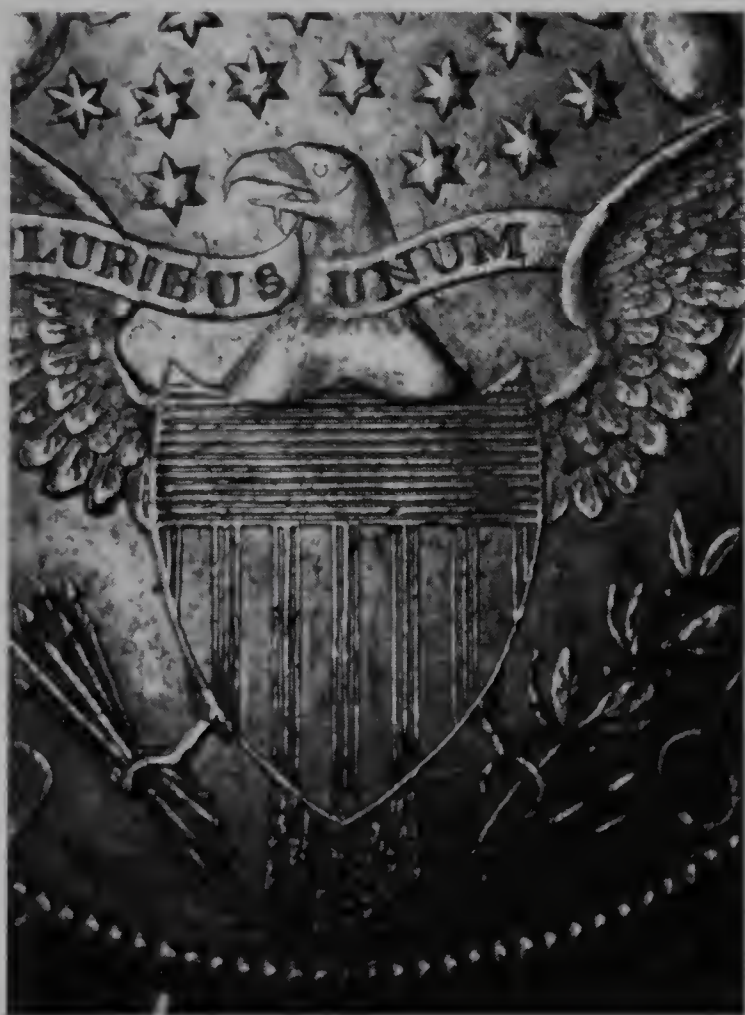


Figure A - Reverse of 1797 Breen-2D Eagle.
Notice the faint die cracks.

Figure B, the reverse of 1798/7 Breen-1A (9x4 stars), shows that the die crack mentioned above is absent, as is any evidence of die lapping. This reverse die state is common to all specimens of both the 1798/7 Breen-1A (9x4 stars) and 1798/7 Breen-2A (7x6 stars) varieties which have been examined by the author.

This evidence proves that the 1797 Breen-2D and Breen-2C varieties were struck after the two 1798/7 varieties. It also seriously questions the heretofore assigned mintage figures (1, 3, 4) for the two 1798/7 varieties. If the last two '1797' varieties (Breen-2D and 2C) were struck in

1798 then they certainly would have comprised the last two delivery warrants of February 1798 rather than the two 1798/7 varieties.



While current evidence does not permit the author to determine the relative emission sequence of the two 1798/7 varieties, there is no reason to doubt that the correct emission sequence for the heraldic reverse Eagles of 1797 and 1798 is as follows:

1797	Breen-2B
1798/7	Breen-1A (9x4 stars)
1798/7	Breen-2A (7x6 stars)
1797	Breen-2D (reverse of 1798)
1797	Breen-2C

The author would appreciate any correspondence or additional data at P. O. Box 2548, Portage, MI 49081, or by phone at (616) 323-0179.

(continues on page 31)

Figure B - Reverse of 1798/7 Breen-1A Eagle (9x4 star obverse). No die cracks visible.

How Do I Collect Thee?

Let Me Count the Ways

(or, A Scheme for Collecting Capped Bust Eagles)

David Kenny

There are three major questions each collector must ask: Why collect?, What to collect?, and How to collect? Many writers have tackled the first question from either a generic, a psychological, or a pathological point of view. But, it is impossible to give an adequate answer to this question because the decision to collect is a personal one. Each person makes this decision based on his own particular reasons. Choosing the objective of a collection is also very personal, and the choice can be based on financial, aesthetic, utilitarian, hereditary, intellectual, historical, emotional, professional, or recreational considerations. Those of you who have read my previous three articles, and the title of this one, would suspect that I am a collector of early eagles. My professional life, however, revolves around the buying and selling of Asian art. In that capacity I have become a collector of collectors. In the past twenty-five years I have not met two collectors with the same motivation or the same scope to their individual collecting patterns. Nevertheless, each collector must inevitably become a student of the object of his or her collecting. The depth to which a collector learns about the objective of a collection is reflected directly in the quality and stature of the collection that is formed. To that end, I endeavor in this article to present several methods for collecting early U.S. eagles. This approach may also be applied to other series of numismatic material, and I hope you will find it useful.

A variety oriented collection is the most comprehensive collection that can be made of any particular series of coins. A date and mintmark set will contain fewer coins than a variety set of the same series. Type collections of many series can be completed with much less effort, and some series can be represented by a single coin. For early eagles there are several options for choosing the nature of a type set. Some of these choices would yield a collection that contains more coins than a date set. The most simple form of type collecting Capped Bust Eagles is based solely on the size of the coin, the weight of the coin, and the device used to represent Liberty. The eagles minted between 1795 and 1804 are the largest eagles, the heaviest eagles, and the only 22 karat gold eagles made by the Mint. Furthermore, while the Indian Head Eagle bears a portrait in a feathered bonnet, and the Liberty Head style designed by Christian Gobrecht wears a tiara with the word Liberty on it, the early eagles have the only Liberty wearing a cap. To accomplish the goal of having an eagle with the three attributes of largest diameter, highest gold purity and content, and a Capped Bust, you only have to own one of these beautiful coins.

“Which one,” you ask? Many type collectors choose the first year of issue. Others choose the most common date. Either of these choices has a different reverse. So now you have to have both the first year of issue (also the most common date of small eagle reverse eagles) and either of the two common dates of 1799 or 1801 to capture the heraldic eagle reverse. Now that we are looking at the obverses of our two different reverse eagles we see that the 1795 has fifteen stars and the 1799 (or 1801) has only thirteen.

Using the number of obverse stars, and their arrangement around the perimeter, the following types of eagles can be found:

Fifteen stars arranged 10 x 5 (1795)	Thirteen stars arranged 9 x 4 (1798)
Sixteen stars arranged 8 x 8 (1796)	Thirteen stars arranged 7 x 6 (1798)
Sixteen stars arranged 12 x 4 (1797)	Thirteen stars arranged 8 x 5 (1799-1804)
Sixteen stars arranged 10 x 6 (1797)	

The above seven coins will have only five different dates. Further examination of the 8 x 5 arrangement of stars shows three distinct styles: the 1799 small stars, the 1799, 1800, 1801, and 1804 stumpy large stars, and the 1801 and 1803 pointy large stars. In order to have a representative of each of the obverse star arrangements and sizes we must have nine coins. This will complete our obverse type set of Capped Bust Eagles. Though there are several choices of dates for the three sizes of the 8 x 5 star arrangement, a total of seven different dates can be chosen for the nine-coin set. These choices are either of these five sets:

(95, 96, 97, 98, 99, 00 and 01) (95, 96, 97, 98, 99, 00 and 03)
(95, 96, 97, 98, 99, 01 and 03) (95, 96, 97, 98, 99, 01 and 04) and
(95, 96, 97, 98, 99, 03 and 04).

At this point we need to take closer notes on the reverses of these coins. An intense analysis of the reverses of the 1795 eagle (10 x 5 stars) and the 1796 eagle (8 x 8 stars) will show that the palm branch held in the eagle's claws has 13 and 11 leaves, respectively. Re-reading my last article, we see that the die used for the 1796 reverse is the same as the 1797 (12 x 4 stars). So it seems that we have covered all the types of small eagle reverses and obverses available until someone with very deep pockets reminds us that there is a nine-leaf variety, and this would be a distinct type. (Can we throw this guy out, or what?) There are only ten specimens of the nine leaf branch reverse 1795 eagle, and I bet there are many more compelling coins out there to own in a type collection than one of those. Of course, if you already happen to own a nine-leaf eagle, I'd like to borrow it for a few years.

Our study of reverses also shows that the stars on the heraldic eagle reverse come in different patterns and sizes. The 1797 (10 x 6 stars) has three different patterns of stars under the clouds. Two of these patterns are of the 'cross star' arrangement, and both the stars and the eagle's neck are noticeably different. The third pattern is of the 'arc star' arrangement, but fortunately we already have this reverse on either of the 1798 dated coins (9 x 4 and 7 x 6 stars). Another important observation is made when the size of the stars is considered. Some of the 1803s, and the 1804, have larger reverse stars than the rest of the issues. To further complicate things, one of the 1803 dated varieties of large reverse star eagles has a 14th star punched on top of the rightmost cloud. Since this is the only instance of a 14 star reverse occurring on early eagles, it may be considered to be a type or a variety, as you wish. To obtain all of these types of early eagles we need to acquire no fewer than twelve coins. If you count the nine leaf 1795 you need thirteen, the number of the original colonies. In the process we also acquire at least one coin from each of the nine dates that appear on these eagles.

The following chart summarizes the complete approach to type collecting Capped Bust Eagles. Even if you choose to collect by date, there would still be four dates that could require two representative coins to fully express the Mint's production during the years of 1797, 1798, 1799, and 1803. This yields a 13-coin collection with two of the types being duplicated. The 1799 with large obverse stars and the 1800 eagle are of the same type, and the 1801 with large pointy stars and the 1803 with small reverse stars are also of the same type.

If these large early gold coins, some of which share reverse dies with Draped Bust Half Dollars, have inspired you to own more than one, why stop short of a complete 32-coin variety set? Okay, how about a 31 -coin variety set? (Remember that tough nine-leaf palm branch reverse?) A rough extrapolation from the Red Book would indicate that the 31 varieties of Capped Bust Eagles in EF grade would only cost 60% more than the 450 varieties of Capped Bust Halves in the same state of wear. Since we would already be spending enough to buy a modest house to own the half dollar collection, we might as well add a garage, pool and an acre or two to own the eagle collection.

If I may make one further recommendation for any beginners who may have an opportunity to read this publication: please buy some books, and read them! An understanding of the history, the people, the machinery and the politics surrounding any coinage issue is essential to the fullest enjoyment of numismatics. Pursuing collecting in this manner will increase your pleasure, intellectual involvement, and personal growth.

From this chart we see there are 4 major reverse types [A through D], 9 major obverse types [1 through 9], and 10 combinations. I would recommend 2 additional coins to cover all the bases [11 and 12], but this borders on variety collecting.

TYPE A				
Small Eagle Reverse	1	1795 stars 10x5 - 13 leaf palm branch	13	9 leaf palm branch
	2	1796 stars 8x8 - 11 leaf palm branch		
	3	1797 stars 12x4 - same reverse as 1796		
TYPE B				
Heraldic Eagle Reverse with seven vertical striped gules in shield	4	1797 stars 10x6 - long-necked eagle, crossed stars	12	medium-necked eagle, crossed stars
	5	1798 stars 9x4 - arc star pattern reverse		
	6	1798 stars 7x6 - arc star pattern reverse		
TYPE C				
Heraldic Eagle Reverse with six vertical striped lines in shield and small star reverse	7	1799 stars 8x5 and of small size		
	8	1799 stars 8x5 and of large blunt size (also 1800 and 1801)		
	10	1801 stars 8x5 and of large pointy size (also 1803)		
TYPE D				
Heraldic Eagle reverse with large star reverse	9	1803 with 14th star on cloud, large pointy obverse stars		
	11	1804 with only 13 large reverse stars, large blunt obverse stars		

Table listed in author's opinion of numerical order of importance.



1797 AND 1798 EAGLES - CORRECTED DIE EMISSION SEQUENCE

(continued from page 27)

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But It's Only an R1!!!

Philip J. Evans

One of the surprises that a beginning Bust Half variety collector will encounter is the price premium that is to be found on what we 'Nuts' often consider to be 'common' coins. Once you have become oriented to the price structure for the various levels of rarity within the Capped Bust Half die marriage family, you find that you must shift gears when you are offered one of the 'popular', R1 through R3 varieties.

A question that I regularly ask other Bust Half seekers, and especially those who are in the coin business full time, is, "how many serious collectors of Bust Half varieties do you think there really are?" I get some interesting answers. There is the 'hard core' of members of the Bust Half Nut Club, of course. Then there is the wider group who belong to the John Reich Collector's Society (as do most BHNC members), and there are also, I am learning, quite a significant number of 'non-joiners' who are very serious about early varieties and collect them vigorously. The next question is, "How many other serious collectors of more than just one Bust Half type coin do you think there may be?" This would include the fairly numerous collectors who want a 'year' set of Bust Halves, and the many others who collect as many of the 'Redbook' listed varieties as they can locate. My point is simple. Those of us who would love to own 453 die marriages are not the only people seeking quite a few of the varieties - and that's why some of them cost hefty premiums above 'type coin' levels.

As far as I can determine, the market for Capped Bust Halves very well might make a great computer model for a truly economics driven 'free' market. Supply and demand really do seem to set the price paid, most of the time, at least when time and information factors permit them to work freely. The only regret I have in regard to the 'whole bunch' sale of the Overton collection last year is that we didn't get to see what the open market would have arrived at in the way of prices for individual varieties in specific grades.

The accompanying chart lists what I have found. I used EF-40 as the grade for making comparisons, and the new edition of **Bust Half Quotes**, by Fricke and Karoleff was my basic source of pricing information. However, you will note one coin on which CDN, and 'Trends' disagree with 'Quotes'. Oh, well, nobody's perfect!!

You will also note that I researched only R1, R2 and R3 coins which bring a premium over their 'normal' siblings. As we all well know, R4 and up do bring premiums, though the premium is, I am sure, made greater if the coin is also noticeably 'different'. The most famous of that category has to be our old friend, 'The Bearded Goddess'. No other R4s command that kind of price!

There is another very distinct factor involved in what kind of premium a coin commands. That is how easy it is to spot, when giving the coin even a cursory examination. All of us who attribute varieties are aware that many dealers have no interest whatsoever in doing attributions. However, if there is something 'different' about a coin that literally jumps out at you at a glance, and could make it sell for more than the normal type coin, you will take note, and action. That must be why some of the overdates bring such substantial premiums.

My list does not contain all of the 'Redbook' varieties, since some of them are distinctions (such as the small date and large date 1820) which do not, apparently, create a price differential. I do not claim that this is an absolutely complete list, nor do I claim that the price premiums are exact. They are estimates. You've heard that word before, haven't you? I find that writing for the **JRJ** audience makes it absolutely mandatory to issue strong disclaimers at the outset!

The premium priced 'common' varieties

YEAR	POPULAR DESCRIPTION	OVERTON & RARITY #	PREMIUM OVER 'NORMAL' TYPE - COMMENTS
1808	1808/7 Overdate	O101 R1	15% to 20% PREMIUM 1808 Bust Halves are always in demand, which is probably why the premium is not larger. Not really too obvious, either.
1811	1811/10 Overdate Double Punctuated Date Small 8	O101 R1	40% TO 45% PREMIUM Quite popular, and not too hard to spot
1812	1812/11 Overdate Small 8	O102 R2	75% TO 80% PREMIUM Surprisingly high premium for an overdate that is not too easy to see.
1813	50/UNI	O101 R2	40% TO 45% PREMIUM A well known and popular coin

1814	1814/13 Overdate	O101	R2	<p>20% TO 25% PREMIUM A magnified examination will usually spot this one - but, for some reason, not very popular</p>
1814	E/A in STATES	O108	R1	<p>35% TO 40% PREMIUM Quite easily missed by non-variety people - but still has considerable premium.</p>
1815	1815/12 Overdate	O101	R2	<p>NOT TRULY A PREMIUM-- JUST A HIGH PRICE! It is the only available coin for the year, as well as the lowest mintage of the entire series, so it is no surprise that it commands a whopping price. Most are certainly owned by non-variety collectors!</p>
1817	1817/13 Overdate	O101	R3	<p>300% AND UP PREMIUM This one is usually so obvious that no dealer could miss it, and a great example of an overdate for the non-variety collector. Very popular. It is often a real stunner - and even non-collectors can see it!</p>
1817	181.7 - Punctuated Date	O103	R2	<p>25% TO 30% PREMIUM Not too hard to spot, if you really examine the date - also found without punctuation.</p>
1818	8/7 Overdate	O101	R1	<p>10% TO 15% PREMIUM Plenty around for everybody!</p>
	Large 8	O102	R1	
		O103	R1	

1819	9/8 Overdate Large 9	O102	R2	7% TO 40% PREMIUM !!! The O102 and O104 bring only a small premium - while O105 shows 40%. Someone tell me why!
		O104	R1	
		O105	R2	
1819	9/8 Overdate Small 9	O101	R1	7% TO 80% PREMIUM Another puzzler - O101 is small premium, and O103 is large - but why?
		O103	R3	
1820	20/19 Overdate O101 Square Base 2 O102 Curl Base 2	O101	R1	20% TO 25% PREMIUM Perhaps the premium is low because all 1820s are scarce and demand a good price to begin with. Not hard to spot. Any ideas?
		O102	R1	
1822	22/21 Overdate	O101	R1	100% AND HIGHER PREMIUM You tell me why it has a much larger premium. Because O102 (also 2/1) is an R4???
1823	Broken 3	O101	R3	160% PREMIUM The various 3 irregularities are always popular, and they are so well known that everyone looks for them.
1823	Patched 3	O101a	R1	70% PREMIUM Another of the popular and sought after variations in the 3.
1823	'Ugly' 3	O110a	R3	65% PREMIUM Still another of the popular 3 variations. Who decided it is ugly??
1824	24/21 Overdate	O101	R2	55% TO 60% PREMIUM Not too easy to spot - but quite popular.

1824	4 over various	O103	R1	<p>25% TO 35% PREMIUM Quite easy to see, but not as popular as the 4/1 above, so the premium is lower.</p>
1824	4/4 Overdate	O110	R2	<p>5% TO 10% PREMIUM Not easy to see - plentiful - low popularity.</p>
1827	7/6 Overdate	O101 O102 O103	R2 R1 R4	<p>20% TO 30% PREMIUM This one can require a good eye, but it is well known enough to bring a premium.</p>
1827	Curl Base 2	O146 O147	R2 R2	<p>20% TO 25% PREMIUM The O147 is an R4, and this is an easy one to pick out, so it is popular, and priced that way.</p>
1828	Curl Base 2 with Knob	O106 O107	R2 R2	<p>65% PREMIUM Easy to see, and well known</p>
1828	Square Base 2, Small 8, Small letters in legend	O119	R3	<p>150% PREMIUM "Quotes" does not give this a premium, but the other pricing guides definitely do so.</p>
1829	9/7 Overdate	O101 O102	R1 R1	<p>45% PREMIUM This is quite obvious and well known.</p>
1832	Large Letters in legend	O101	R1	<p>60% TO 70% PREMIUM Another that is easy to spot if you know the series, and well known enough to be popular.</p>
1836	1836/1336 Overdate	O108	R2	<p>18% TO 20% PREMIUM Not really easy to spot, so low premium</p>
1836	50/00 Reverse	O116	R2	<p>70% TO 80% PREMIUM Not hard to see and well known, so it brings a very good premium.</p>



Auction Appearances of Bust Halves

Dave Rutherford

Over the last few years there have been many articles in the **JRJ** about the number of Bust Half Dollars in existence and their rarity by variety. Since I keep a database of auction results, I thought it would be interesting to see which were the most, and least, frequently occurring varieties at auction. This view of the Bust Half world should give different results than looking at occurrences of varieties at coin shows or in old hoards.

The following gives the results from eighty auctions with 5000 plus lots for the sales from the last 4 to 5 years. When tabulating infrequent appearances for varieties, I have distinguished between prime and subvarieties. I have combined the counts of prime and sub varieties for the more frequently encountered varieties.

Clearly, if one only looked at auctions they would get a skewed view of the rarity for the scarcer varieties. This discrepancy is due to the fact that a seller can get a fair price for low rarities from any dealer while R4 or rarer varieties usually go to auction for fair prices. Also, only high grade examples of low rarity varieties will be sold at auction while most grades of R5 and rarer varieties will be sold at auction,

Rarest varieties at auction

Year	Variety	Rarity	Number
1808	O104a	R3	0*
1814	O107a	R2	0*
1817/14	O102p	R7	0
1817/14	O102a	R7	0
1817	O104a	R6	0
1818/17	O103a	R3	0*
1819/18	O104a	R2	0*
1820	O104a	R4	0*
1823	O113p	R8	0
1824	O113a	R2	0*
1825	O118	R7	0
1827	O149	R7	0
1828	O118a	R3	0*
1829	O120	R7	0
1830	O106a	R3	0*
1831	O110a	R4	0*

1832	O123	R7	0
1833	O103a	R3	0*
1833	O105a	R3	0*
1835	O111	R7	0
1807	O111p	R6	1
1811	O105p	R3	1
1812	O110a	R1	1*
1813	O108a	R2	1*
1819	O109a	R2	1*
1823	O106p	R3	1
1824	O112a	R4	1*
1825	O106a	R3	1*
1826	O116p	R1	1
1827	O148p	R7	1
1827	O148a	R8	1
1828	O107a	R2	1*
1832	O105a	R3	1
1833	O110a	R2	1*
1833	O116	R7	1
1834	O115a	R4	1*
1834	O122	R7	1
1836	O116a	R4	1*
1836	O123	R3	1

* These are subvarieties that are new listings in the Third Edition of Overton.

p This indicates the prime state of this variety

Most frequent varieties at auction

Year	Variety	Rarity	Number
1809	O107#	R3	19
1819/18	O101	R1	19
1829	O115	R2	19
1829	O116#	R2	19
1832	O106	R6	19
1832	O118	R1	19
1809	O104	R5	19
1808	O110#	R5	20
1818	O112#	R1	20

--- AUCTION APPEARANCES OF BUST HALVES

1824	O109	R2	20
1826	O115	R5	20
1832	O103	R1	20
1832	O115	R1	20
1834	O114	R1	20
1836	O106#	R1	20
1836	O108#	R1	20
1836	O116#	R2	20
1807	O113#	R2	21
1827	O120#	R3	21
1831	O103	R1	21
1832	O101#	R2	21
1833	O101	R1	21
1834	O109	R1	21
1830	O113	R2	22
1834	O107	R1	22
1807	O114	R3	22
1812	O103	R1	23
1820	O105#	R1	23
1827	O116#	R5	23
1835	O101	R1	23
1809	O106	R3	24
1812	O105#	R1	24
1823	O101#	R3	25
1823	O112	R1	25
1809	O108#	R4	26
1817	O106#	R2	26
1829	O112#	R1	26
1809	O109#	R2	27
1814	O105#	R2	27
1824/1	O101#	R2	29
1811	O110#	R1	30
1808/7	O101	R1	31
1817/13	O101#	R2	31
1810	O101#	R1	32
1813	O101#	R2	33
1822/1	O101	R1	35
1807	O112	R1	42
1815/12	O101#	R2	56

Includes sub varieties



Long-Lost 1796 Dollar Rarity Found

Bowers and Merena

The second known example of a rare early silver dollar variety has recently been consigned to Auctions by Bowers and Merena. The coin is a 1796 Draped Bust, Small Eagle Dollar and is the variety known as Bowers-Borckardt 64. This variety is also provisionally known as “Bolender-6” even though Bolender did not know of its existence when his early silver dollar reference was first published.

Silver dollars dated 1796 provide an interesting challenge for the variety collector. Just six varieties are known, struck from four obverse and four reverse dies. Of these, four are relatively easy to locate while the other two are nearly impossible. The BB62 (B3) variety is apparently unique and has not been seen since sold by Stack’s in 1974. The other rare variety, BB64 (B6) is known by just two examples. Bowers and Borckardt, in their **Silver Dollars and Trade Dollars of the United States**, listed one example of this variety, grading net VG-8, in a well-known Eastern collection, and mentioned the possibility of a second example existing. At the time of publication, this second example was untraced with no further details known. Now, this long-lost 1796 rarity has been found!



The obverse, die features a small, wide date and is the same die also used to strike the 1796 BB63 variety. The reverse is not known on any other variety in the entire series. This example has the heavy reverse die crack which immediately provides identification of the variety. The left and much larger portion of the reverse is on a slightly higher plane than the right portion. Both known examples have very shallow strikes, perhaps representing the coiner's attempt to save the die by spacing the dies further apart than usual. Also common to both known coins, the right portion of the reverse, which was protected from wear, has significant detail. This newly rediscovered example has a distinct prooflike appearance in this portion of the reverse which, separately, grades at least AU-55. Overall, we grade the coin EF-40.

The chronological history of this variety is fascinating. When Bolender published his pioneering work on the early dollars in 1950, he was not aware of the existence of this variety. Our consignor, however, states that the coin was purchased from Bolender in 1951. As is often the case, a new discovery may have been made shortly after the book was published, although it is not known if Bolender recognized this to be a new and unlisted variety. No documentation accompanied the coin when Bowers and Merena received it. The other example of the BB64 variety, the VG-8 specimen, was turned up by Walter Breen in the mid to late 1950s. In one report, Breen states 1954 and the other, 1957. Apparently, Walter was not aware of the existence of the currently offered specimen as he claimed to be the discoverer of the variety. The Breen specimen was then placed in the collection of K. P. Austin and sold to A. J. Ostheimer in whose collection the coin was offered for sale by Superior in the 1975 ANA Convention Auction. Today, it is in the cabinet of a well-known Eastern specialist.

This newly rediscovered example of 1796 BB64, the finest known specimen, represents only the second auction appearance for the variety and was offered by Auctions by Bowers and Merena in that firm's September 11-12, 1995 auction held in New York City. A copy of the catalogue is available for \$20 from Bowers and Merena, Box 1224, Wolfeboro, NH 03894.



